

ORIGINAL



BEFORE THE ARIZONA CORPORATION COMMISSION

**COMMISSIONERS**

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ARIZONA CORPORATION COMMISSION  
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Arizona Corporation Commission  
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IN THE MATTER OF THE APPLICATION ) DOCKET NO. E-04204A-14-0178  
OF UNS ELECTRIC, INC. FOR APPROVAL )  
OF ITS 2015 ENERGY EFFICIENCY ) **APPLICATION**  
IMPLEMENTATION PLAN )

UNS Electric, Inc. ("UNS Electric" or "Company"), through undersigned counsel, in accordance with Arizona Administrative Code R14-2-2405, hereby submits, its 2015 Energy Efficiency Implementation Plan ("EE Plan") for Arizona Corporation Commission ("Commission") review and approval.

**I. Approval of 2015 EE Plan.**

UNS Electric's 2015 EE Plan sets forth the Company's existing and proposed modifications to the Demand-Side Management programs, and describes how those programs will further the Company's compliance with the requirements of the Electric Energy Efficiency Standard ("EE Standard"). The Company requests approval of the EE Plan in its entirety, including all new EE measures requested, in order to provide the Company with an opportunity to achieve compliance with the EE Standard by the end of 2015.

**II. Conditional Request for Waiver.**

UNS Electric has had difficulty meeting the EE Standard since 2011 due to a variety of factors outside of its control, including the timing of the effectiveness of the EE Rules, the timing of approvals of the Company's previous EE Plans and other economic factors described in the EE Plan. However, due to declining retail sales over the past two years, UNS Electric is closer to compliance due to a parallel reduction in the compliance target. However, if the 2015 EE Plan

1 is not approved as submitted, UNS Electric will not be able to meet the EE Standard in 2015 and  
2 would request that the Commission grant the Company a waiver from the EE Standard for 2015  
3 in accordance with A.A.C. R14-2-2419(B).

4 **III. Reset of Demand-Side Management Surcharge.**

5 UNS Electric is not seeking a reset of the current Demand Side Management Surcharge  
6 ("DSMS") in this application. In Decision No. 74262 (January 7, 2014) (corrected *Nunc Pro*  
7 *Tunc* by Decision No. 74457 (April 18, 2014)), the Commission approved UNS Electric's 2013  
8 EE Plan and required Commission Staff to, "re-calculate the cost-effectiveness of all of UNS  
9 Electric's EE Plan's measures, review and calculate the cost-effectiveness of the new EE  
10 measures UNS Electric proposed for its 2013 EE Plan, and file a report and recommendations by  
11 May 30, 2014. Interested parties and stakeholders shall file any comments on the Staff report  
12 and recommendations by June 30, 2014." UNS Electric anticipates that once the Staff report is  
13 filed and comments are submitted and addressed, the DSMS will be reset by the Commission.

14 **IV. Conclusion.**

15 WHEREFORE, UNS Electric respectfully requests that the Commission issue an order  
16 on or before December 31, 2014, 1) approving the Company's 2015 EE Plan, and/or 2) to the  
17 extent necessary, grant a waiver from the 2015 EE Standard in accordance with A.A.C. R14-2-  
18 2419(B).

19 RESPECTFULLY SUBMITTED this 2nd day of June 2014.

20 UNS ELECTRIC, INC.

21 By 

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6 Original and 13 copies of the foregoing  
7 filed this 2nd day of June 2014, with:

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By 

**UNS ELECTRIC, INC.  
2015 ENERGY EFFICIENCY  
IMPLEMENTATION PLAN**

**JUNE 2, 2014**

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Exhibit 1      Proposed New DSM Measures

## I. 2015 Implementation Plan Executive Summary

UNS Electric, Inc. ("UNS Electric" or the "Company") hereby submits its 2015 Energy Efficiency Implementation Plan ("EE Plan") for Arizona Corporation Commission ("Commission") approval, in compliance with Arizona Administrative Code ("A.A.C") R14-2-2405. As part of its EE Plan, UNS Electric has included a short description of the existing Commission-approved Energy Efficiency ("EE") programs, the proposed new EE measures, the estimated total cost and cost per kWh reduction for each program, an estimate of the annual kilowatt hour ("kWh") and kilowatt ("kW") savings projected for each program, and how these programs contribute to the Company's 2015 EE savings goal.

Due to a variety of factors outside its control, UNS Electric may not cost-effectively meet the cumulative EE Standard set forth in A.A.C. R14-2-2404.B in 2015. However, due to declining retail sales for the past two years, the target UNS Electric must meet to attain compliance with the Standard has also declined. This decline in sales has brought UNS Electric closer to compliance with the Standard. Therefore, if the Company receives approval of the EE Plan in its entirety, including all new EE measures requested, by December 31, 2014 it may be able to reach compliance with the Standard by the end of 2015.

Table 1-1 illustrates the amount of compliance with the EE Standard for the years 2011-2015, with 2014 and 2015 being forecast based upon projected participation. The 2014 forecast EE savings are dependent upon the Commission approving all existing and new EE measures the Company requested in its 2013-2014 EE Plan.<sup>1</sup>

**Table 1-1 UNS Electric Compliance with EE Standard for Years 2011-2015**

Year	Retail Energy Sales (MWh)	Incremental Annual Energy Savings (MWh)	Cumulative Annual Energy Savings (MWh)	Cumulative Annual Savings as a % of previous year Retail Sales	Cumulative EE Standard
2010	1,857,160				
2011	1,852,904	15,005	15,005	0.81%	1.25%
2012	1,755,541	35,032	50,037	2.70%	3.00%
2013	1,699,307	34,764	84,801	4.83%	5.00%
2014	1,679,103	36,095	120,896	7.11%	7.25%
2015	1,681,523	38,438	159,335	9.49%	9.50%

Accordingly, the Company requests a waiver from the 2015 EE Standard in accordance with A.A.C. R14-2-2419.B if the existing and new measures from the Company's 2013-2014 EE Plan, as well as the new measures requested in this 2015 EE Plan are not approved. The waiver request notwithstanding, UNS Electric will continue to strive to maximize the cost-effective savings achieved for the dollars spent.

<sup>1</sup> Docket No. E-04204A-12-0219, Decision No. 74262 (January 7, 2014) required Commission Staff to "recalculate the cost-effectiveness of all of UNS Electric's EE Plan's measures, review and calculate the cost-effectiveness of new EE measures UNS Electric proposed for its 2013 EE Plan, and file a report and recommendations by May 30, 2014." (page 17, lines 22-25)

The Company estimates a 2015 EE Plan budget total of approximately \$5.2 million. A summary of the portfolio budget, portfolio savings, net benefits, and benefit-cost results appear in Table 1-2.

**Table 1-2. Summary of Portfolio Costs and Saving**

<b>Program Year</b>	<b>Total Program Budget</b>	<b>Annual Energy Savings (MWh)</b>	<b>Lifetime Energy Savings (MWh)</b>	<b>Peak Demand Savings (MW)</b>	<b>\$/kWh (Lifetime)</b>	<b>Portfolio Societal Test Ratio</b>
2015	\$5,247,046	38,438	297,711	11.25	\$0.02	2.8

As part of UNS Electric’s EE Plan, the Company is proposing to add one new LED lighting measure to the Efficient Products program, and five new LED lighting measures to the C&I Facilities program, thereby enhancing these existing EE programs. Details about these programs are included in: Section IV, Residential Programs, subsection (A), Efficient Products; and Section V, Commercial Programs, subsection (A), C&I Facilities.

UNS Electric has eliminated: 1) the Home Energy Reports Program because it does not meet cost-effectiveness required in A.A.C. R14-2-2412,<sup>2</sup> 2) the Residential Energy Efficiency Financing Program due to lack of interest as demonstrated by zero participation since 2012.<sup>3</sup> The Schools Facilities Program has been combined with the C&I Facilities Program per Commission Decision 74262 (January 7, 2014).

The following programs will continue to be administered with no modifications: Appliance Recycling; Low-Income Weatherization (“LIW”); Residential New Construction; Shade Tree; Existing Homes and Audit Direct Install (“Existing Homes”); Multi-Family; Behavioral Comprehensive; Energy Code and Standards Enhancement (“ECSEP”); Bid for Efficiency (“BFE”); Retro-Commissioning (“RCx”); C&I Demand Response; and Consumer Education and Outreach (“CEO”).

UNS Electric also requests the continuation of budget flexibility between programs within the same customer class. UNS Electric will be able to shift up to 25% of a program’s budget from a less active program to a more active program, but will not shift funds between residential and non-residential program sectors. UNS Electric will be able to increase its overall portfolio budget by 5% if necessary. This flexibility is consistent with the budget flexibility approved by the Commission in Decision No. 74262.

UNS Electric respectfully requests Commission approval of its 2015 EE Plan on or before December 31, 2015. UNS Electric believes this EE Plan is prudent, is necessary to the successful implementation of the EE Standard, and is in the public interest.

<sup>2</sup> See UNS Electric’s Annual Demand-Side Management Progress Report for 2013, Docket No. E-00000U-14-0049, for further information

<sup>3</sup> Same as above

## **II. Introduction**

UNS Electric has designed a comprehensive portfolio of programs to deliver electric energy and demand savings in an attempt to meet the annual EE savings goals outlined in the EE Standard. These programs include: i) incentives, direct-install, and buy-down approaches for energy efficient products and services; ii) educational and marketing approaches to raise awareness and modify behaviors; and iii) partnerships with trade allies to apply as much leverage as possible to augment the rate-payer dollars invested.

### **A. Implementation Plan Goals and Objectives**

UNS Electric's high-level efficiency-related goals and objectives for 2015 are as follows:

- Deliver only cost-effective EE programs;
- Offer a diverse group of programs that provide opportunities for all customers to participate;
- Achieve a cumulative energy savings goal equal to 9.59% of 2014 retail sales (see Table 3-3);
- When feasible, maximize opportunities for program coordination with other EE programs (e.g., those administered by Southwest Gas Corporation and Arizona Public Service Company ("APS")) to yield maximum benefits;
- Maximize comprehensive cost-effective savings opportunities;
- Utilize [www.uesaz.com](http://www.uesaz.com) to provide UNS Electric customers and contractors with detailed information on the electricity savings opportunities available through the Company's EE programs;
- Expand the EE infrastructure in the state by increasing the number of available qualified contractors through training and certification in specific fields;
- Use trained and qualified trade allies, such as electricians, HVAC contractors, builders, architects, and engineers, to help expand the market for efficient technologies; and
- Inform and educate customers on how to modify behaviors to use energy more efficiently.

### **B. Planning Process**

UNS Electric's portfolio of programs refocuses elements of the nation's most successful EE programs into programs specifically designed to meet the Company's customer needs. Evaluations, program plans, and EE-potential studies were used to develop specific programs for UNS Electric. UNS Electric also used a benchmarking process to review the most successful EE programs from across the country, with a focus on successful Southwestern programs to help shape the portfolio.

### **C. Portfolio Risk Management**

As of May 2014, the Arizona economy remains in the midst of recovering from a severe economic recession. In this economic environment, UNS Electric's customers continue to have less motivation to incur the additional up-front expense of installing more energy efficient and long-term cost-effective measures. Even with very short pay-back periods, it will likely continue to present a challenge. UNS Electric recognizes this dilemma and will continue to offer a portfolio of programs to provide for participation at multiple levels. By delivering a multi-faceted and broad portfolio of programs that offers something for all ratepayers, UNS Electric attempts to capitalize on the sectors of the market who want to invest in EE, at whatever cost point they can afford. In balance, this allows the Company to attempt to meet the Commission's aggressive EE Standard.



UNS Electric used the following strategies to minimize the risks and produce the lowest cost associated with its portfolio of EE programs:

- Implemented “tried and true” cost-effective programs that have been successfully applied by other utilities in the Southwest and across the country; and
- Implemented cost-effective programs through a combination of third-party Implementation Contractors and utility staff. UNS Electric designed programs on the most cost-effective basis.

### III. Program Portfolio Overview

The following is an overview of the existing EE programs for the residential, commercial and industrial (“C&I”) sectors, as well as their associated implementation costs and savings. As demonstrated in Table 3-1, UNS Electric’s portfolio of programs is divided into residential, commercial, behavioral, and support sectors. Administrative functions provide support across all program areas. Information on existing program design and proposed new measures are located in Section IV through Section VII.

**Table 3-1. UNS Electric Portfolio of Programs**

PROGRAM NAME	NEW OR EXISTING	DESCRIPTION
<b>Residential Sector</b>		
Appliance Recycling	Existing (no modifications)	Removes and recycles inefficient refrigerators and freezers
Low-Income Weatherization	Existing (no modifications)	Assists in making low-income homes more energy efficient
Existing Homes and Audit Direct Install	Existing (no modifications)	Promotes EE in existing homes
Residential New Construction	Existing (no modifications)	Promotes the building of more energy efficient new homes
Shade Tree	Existing (no modification)	Promotes planting of desert-adapted shade trees in locations designed to enhance EE
Multi-Family	Existing (no modifications)	Promotes direct install of energy efficient measures at apartment complexes consisting of more than four dwellings
Efficient Products	Existing (one new lighting measure proposed)	Promotes customer purchases of CFLs, advanced power strips, and energy efficient pool pumps and timers
<b>Commercial Sector</b>		
C&I Facilities	Existing (five new lighting measures proposed)	Persuades business customers to install EE equipment at their facilities and encourages contractors to promote the program
Bid for Efficiency	Existing (no modifications)	Customers or project sponsors develop a holistic EE project then bid competitively for incentives within program guidelines
Retro-Commissioning	Existing (no modifications)	Promotes existing facilities to use a systematic approach to identify building equipment or processes that are not achieving optimal performance or results
C&I Demand Response	Existing (no modifications)	The Program is delivered in-house by engaging with commercial and industrial customers and encouraging those customers to participate in a proactive demand response program. The Company will install equipment that provides control of either selected loads or the entire facility for participants.
<b>Behavioral Sector</b>		
Behavioral Comprehensive	Existing (no modifications)	A variety of educational and behavioral programs, including K-12 student education, direct canvassing, community education, and CFL community promotions
<b>Support Sector</b>		
Consumer Education & Outreach	Existing (no modifications)	Consumer education designed to increase participation in UNS Electric EE programs and promote changes in behavior to increase EE
Energy Codes & Standards Enhancement	Existing (no modifications)	Seeks to improve the level of compliance with existing local building energy codes and appliance standards and supports the periodic updating of these codes and standards
Program Development, Analysis, and Reporting	Existing (tracks with portfolio program requirements)	Costs for program research, design, and development, and resources necessary to meet the reporting requirements of the EE Standards

### A. 2015 Savings, Budgets, Benefit-Cost Results

This EE Plan presents a continuing portfolio of investments consistent with the requirements of the EE Standard; however, UNS Electric will continue to monitor projected program funding and participation. The Company anticipates future adjustments in the forecasted investment levels. Additionally, incentive levels and other program elements will be reviewed and modified on an annual basis to reflect changes in market conditions or implementation processes, in order to maximize cost-effective savings. Such modifications will be reported in the annual reports submitted to the Commission. Table 3-2 shows a summary of the costs and energy savings, total net benefits, and the benefit-cost ratio using the Societal Cost Test for the 2015 EE Plan portfolio.

**Table 3-2. Summary of Portfolio Costs and Savings**

Program Year	Total Program Budget	Annual Energy Savings (MWh)	Lifetime Energy Savings (MWh)	Peak Demand Savings (MW)	\$/kWh (Lifetime)	Portfolio Societal Test Ratio
2015	\$5,247,046	38,438	297,711	11.25	\$0.02	2.8

As a result of the timing of the effectiveness of the EE Rules, the delay in Commission approval of the Company's previous EE Plans, as well as other economic factors described herein, UNS Electric may not cost-effectively meet the cumulative EE Standard set forth in A.A.C. R14-2-2404.B in 2015. However, due to declining retail sales for the past two years, the target UNS Electric must meet to attain compliance with the Standard has also declined. This has brought UNS Electric closer to compliance with the Standard. Therefore, if the Commission approves this EE Plan in its entirety including all new EE measure requested in a timely manner, then it may be possible for the Company to reach compliance with the Standard by the end of 2015.

Table 3-3 illustrates the amount of compliance with the EE Standard for the years 2011-2015, with 2014 and 2015 being forecast based upon projected participation. The 2014 forecast EE savings are dependent upon the Commission approving all existing and new EE measures the Company requested in its 2013-2014 EE Plan

**Table 3-3. UNS Electric Compliance with EE Standard for Years 2011-2015**

Year	Retail Energy Sales (MWh)	Incremental Annual Energy Savings (MWh)	Cumulative Annual Energy Savings (MWh)	Cumulative Annual Savings as a % of previous year Retail Sales	Cumulative EE Standard
2010	1,857,160				
2011	1,852,904	15,005	15,005	0.81%	1.25%
2012	1,755,541	35,032	50,037	2.70%	3.00%
2013	1,699,307	34,764	84,801	4.83%	5.00%
2014	1,679,103	36,095	120,896	7.11%	7.25%
2015	1,681,523	38,438	159,335	9.49%	9.50%

Accordingly, the Company requests a waiver from the 2015 EE Standard in accordance with A.A.C. R14-2-2419.B if the Commission does not approve the existing and new measures from the Company's 2013-2014 EE Plan and does not approve the new measures requested in this 2015 EE Plan. The waiver request notwithstanding, UNS Electric will continue to strive to maximize the cost-effective savings achieved for the dollars spent.

Table 3-4 provides cost and savings details per program for 2015. Table 3-5 shows the program budgets by expense category.

**Table 3-4. 2015 Costs and Savings by Program**

Program Name	Annual Energy Savings at Generator (MWh)	Coincident Demand Savings at Generator (MW)	Total Program Budget	Cost per Lifetime kWh Saved (\$/kWh)	Cost per First Year kWh Saved (\$/kWh)
<b>Residential Sector</b>					
Efficient Products	12,821	0.64	\$890,512	\$0.01	\$0.07
Appliance Recycling	587	0.09	\$89,765	\$0.03	\$0.15
Residential New Construction	287	0.21	\$282,618	\$0.03	\$.99
Existing Homes and Audit Direct Install	2,178	1.77	\$1,084,397	\$0.02	\$0.50
Shade Tree	110	0.05	\$35,343	\$0.01	\$0.32
Low-Income Weatherization	376	0.21	\$421,485	\$0.06	\$1.12
Multi-Family	161	0.01	\$20,578	\$0.02	\$0.13
<b>Subtotal</b>	<b>16,519</b>	<b>2.97</b>	<b>\$2,824,699</b>	<b>\$0.02</b>	<b>\$0.17</b>
<b>Commercial Sector</b>					
C&I Facilities	5,222	.92	\$873,501	\$0.01	\$0.17
Bid for Efficiency	3,542	1.98	\$292,005	\$0.01	\$0.08
Retro-Commissioning	1,550	.86	\$205,815	\$0.01	\$0.13
C&I Demand Response	3,631	4.00	\$374,850	NA	NA
<b>Subtotal</b>	<b>13,945</b>	<b>7.76</b>	<b>\$1,746,171</b>	<b>\$0.01</b>	<b>\$0.13</b>
<b>Behavioral Sector</b>					
Behavioral Comprehensive Program	3,066	0.13	\$336,106	\$0.02	\$0.11
<b>Subtotal</b>	<b>3,066</b>	<b>0.13</b>	<b>\$336,106</b>	<b>\$0.02</b>	<b>\$0.11</b>
<b>Support Sector</b>					
Consumer Education and Outreach	NA	NA	\$106,050	N/A	N/A
Energy Codes & Standards Enhancement	4,908	0.39	\$34,020	\$0.01	\$0.01
Program Development, Analysis, and Reporting	NA	NA	\$200,000	N/A	N/A
<b>Subtotal</b>	<b>4,908</b>	<b>0.39</b>	<b>\$340,070</b>	<b>\$0.01</b>	<b>\$0.07</b>
<b>Portfolio Total</b>	<b>38,438</b>	<b>11.25</b>	<b>\$5,247,046</b>	<b>\$0.02</b>	<b>\$0.14</b>

**Table 3-5. 2015 Program Budgets by Category**

Program	Incentives	Program Delivery	Program Marketing	Utility Program Administration	Evaluation	Total Budget
<b>Residential Sector</b>						
Efficient Products	\$449,725	\$319,812	\$53,868	\$42,405	\$24,702	\$890,512
Appliance Recycling	\$20,000	\$40,000	\$23,000	\$4,275	\$2,490	\$89,765
Residential New Construction	\$80,000	\$182,883	\$1,000	\$13,458	\$5,278	\$282,618
Existing Homes and Audit Direct Install	\$631,525	\$281,875	\$109,134	\$51,638	\$10,225	\$1,084,397
Shade Tree	\$25,500	\$4,500	\$3,000	\$1,683	\$660	\$35,343
Low-Income Weatherization	\$375,000	\$9,000	\$3,840	\$20,071	\$13,574	\$421,485
Multi-Family	\$6,099	\$10,000	\$2,500	\$980	\$1,000	\$20,578
<b>Subtotal</b>	<b>\$1,587,849</b>	<b>\$848,070</b>	<b>\$196,342</b>	<b>\$134,509</b>	<b>\$57,930</b>	<b>\$2,824,699</b>
<b>Commercial Sector</b>						
C&I Facilities	\$409,038	\$389,673	\$1,198	\$41,595	\$31,996	\$873,501
Bid for Efficiency	\$200,000	\$70,000	\$0	\$13,905	\$8,100	\$292,005
Retro-Commissioning	\$154,000	\$40,000	\$0	\$5,995	\$5,820	\$205,815
C&I Demand Response	\$0	\$357,000	\$0	\$17,850	0	\$374,850
<b>Subtotal</b>	<b>\$763,038</b>	<b>\$856,673</b>	<b>\$1,198</b>	<b>\$79,345</b>	<b>\$45,916</b>	<b>\$1,746,171</b>
<b>Behavioral Sector</b>						
Behavioral Comprehensive Program	\$183,933	\$122,392	\$7,500	\$16,005	\$6,276	\$336,106
<b>Subtotal</b>	<b>183,933</b>	<b>\$122,392</b>	<b>\$7,500</b>	<b>\$16,005</b>	<b>\$6,276</b>	<b>\$336,106</b>
<b>Support Sector</b>						
Consumer Education and Outreach	\$0	\$0	\$100,000	\$5,050	\$1,000	\$106,050
Energy Codes & Standards Enhancement	\$0	\$30,000	\$0	\$1,620	\$2,400	\$34,020
Program Development, Analysis, and Reporting	\$0	\$200,000	\$0	\$0	\$0	\$200,000
<b>Subtotal</b>	<b>\$0</b>	<b>\$230,000</b>	<b>\$100,000</b>	<b>\$6,670</b>	<b>\$3,400</b>	<b>\$340,070</b>
<b>Total</b>	<b>\$2,534,819</b>	<b>\$2,057,135</b>	<b>\$305,040</b>	<b>\$236,529</b>	<b>\$113,522</b>	<b>\$5,247,046</b>
<b>Percent of Cost by Category</b>	<b>48%</b>	<b>39%</b>	<b>6%</b>	<b>5%</b>	<b>2%</b>	<b>100%</b>

## IV. Residential Programs

This section presents updates to UNS Electric's residential programs, specifically one new measure and proposed changes consistent with requirements of A.A.C. R-14-2-2407. This section also presents a summary discussion of UNS Electric's residential programs.

### A. Efficient Products

*UNS Electric is requesting budget approval and approval to offer one additional measure in 2015.*

#### Program Description

The Efficient Products program promotes the purchase of energy efficient retail products through in-store buy-down promotions and the promotion of EE products in general. This program has been in existence since 2008, and was most recently approved by the Commission in Decision No. 74262.

#### Program Objectives and Rationale

The program offers customers opportunities to reduce their energy consumption by purchasing energy efficient retail products, and furthers the transformation of the market through retail partnerships, training of retail staff, and increased stocking and selection of efficient retail products.

#### New Measure for 2015

UNS Electric is requesting approval to add residential LED lighting to the mix of lighting products which is consistent with Commission approval of residential LED lighting for APS in Decision No. 74406 (March 9, 2014).

Table 4-1 presents new measures to be incentivized by the program in 2015.

**Table 4-1. Measure Efficiencies, Incentive Level, Participation, and Benefit-Cost<sup>4</sup>**

Program Measures	Base Efficiency	High Efficiency	Avg. Incentive p Unit	Estimated Participation	Societal Cost Test
LED Home Lighting	40-75 Watt Incandescent	8-15 Watt LED	\$7.32	3,100	1.5

#### Delivery and Marketing Strategy

No significant changes are anticipated in the implementation, approach, or delivery strategy for Efficient Products program. The program is primarily marketed through mass-market channels (e.g., radio, newspaper, website, etc.) or through education and training of participating retailers.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing and proposed measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The Measurement, Evaluation, and Research ("MER") Plan is consistent with the previously filed strategy.

<sup>4</sup> Additional detail on lifetime energy savings, societal benefits/costs, and environmental benefits of new measures is included in Exhibit 1.

## **B. Appliance Recycling**

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

### Program Description

The Appliance Recycling program is an existing program with an updated Commission approval in Decision No. 74262. The program targets the removal and recycling of operable, but redundant, refrigerators and freezers. An appliance recycling contractor provides turnkey implementation services that include verification of customer eligibility, scheduling of pick-up appointments, appliance pick-up, and recycling services.

### Program Objectives and Rationale

The objective of the program is to produce long-term electric energy savings in the residential sector by permanently removing operable, but redundant, refrigerators and freezers from the power grid and recycling them in an environmentally safe manner.

### New Measures for 2015

No new measures are included for 2015.

### Delivery and Marketing Strategy

The program delivery strategy consists of a third party Implementation Contractor ("IC") who provides implementation services, including eligibility verification, and scheduling of pick-ups and delivery to proper disposal and recycling centers. The IC also coordinates prompt processing of incentive payments.

The program is primarily marketed through mass-market channels (e.g. radio, newspaper, website, etc.) and through brochures. Materials carry a strong consumer education message and leverage the ENERGY STAR® brand. The program is also marketed at retail point-of-sale to increase customer awareness of the program.

### Cost-Effectiveness

In Decision No. 74262, the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

### Other Information

The demand and energy savings estimate for refrigerators and freezers were re-evaluated in 2013 as part of the MER for the Appliance Recycling program for the 2013 program year. Energy and demand estimates were adjusted and the changes have been incorporated into the saving and cost-effective calculations for the 2015 Efficient Products Program.

### **C. Residential New Construction**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

#### Program Description

The Residential New Construction program is an existing program with an updated Commission approval in Decision No. 74262. The goal of the program is to incent builders to build more energy efficient homes. To qualify for an incentive, homes must be tested by an approved energy rater, and meet ENERGY STAR V3 construction standards supported by a Home Energy Rating System (“HERS”) Index score  $\leq 73$ . On the HERS index scale, a score of 100 is considered the average efficiency of baseline new construction. A HERS index score of 0 represents a home that produces all of its energy through on-site generation from renewable energy. Therefore, the lower the HERS score, the more efficient the home. All qualifying homes require a minimum HERS of  $\leq 73$ . The incentive is \$800 per home.

#### Program Objectives and Rationale

The objectives of the program are to promote energy efficient building practices. This is accomplished through builder training, customer awareness, and the promotion of energy efficient homes to consumers.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

The program will continue to be delivered by UNS Electric staff. UNS Electric will provide program management oversight and marketing as well as recruitment, training, and mentorship of participating builders and sub-contractors, data tracking, rebate processing, and technical support.

The program is marketed to select builders primarily through direct business-to-business contacts. The program is also marketed to consumers at home shows and other events focused on home-building, as well as advertised through mass-market and targeted media outlets.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

#### Other Information

To improve the methodology and accuracy of demand and energy savings estimates, UNS Electric will conduct MER and use billing analysis from previous participants to derive a UNS Electric-specific relationship between HERS Scores and energy savings for the primary climate zones in the UNS Electric service territory. Upon completion of the evaluation, energy and demand estimates will be updated from previous assumptions.



**D. Existing Homes and Audit Direct Install**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

Program Description

The Existing Homes and Audit Direct Install program is an existing program with an updated Commission approval in Decision No.74262. The program is targeted to existing homes in need of EE improvements. Although the installation of building envelope air-sealing and insulation are approved measures, the program will concentrate on duct sealing or high-efficiency HVAC equipment installation combined with quality install best practices in 2015.

Program Objectives and Rationale

The program's objective is to achieve energy and demand savings from the proper installation of air conditioners and heat pumps by promoting the early retirement of older, low-efficiency units or incenting new installations that meet the program's quality installation requirements. The Company will continue to promote duct test and repair either as a stand-alone offering or in conjunction with installation of new units. The program will provide training and mentorship for participating contractors to assure proper refrigerant charge, air-flow, combustion safety, and elimination of duct leakage.

New Measures for 2015

No new measures are included for 2015.

Delivery and Marketing Strategy

UNS Electric provides program management, oversight, and marketing. A third party IC is responsible for: i) recruitment, training, and mentorship of participating contractors; ii) data tracking; iii) rebate processing; and, iv) technical support.

UNS Electric provides program marketing and customer awareness-building through website promotion, community interest groups, mass-market channels (e.g., radio, newspaper, etc.), brochures, bill inserts, high bill inquiries, and trade ally marketing efforts.

Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1

Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

**E. Shade Tree**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

Program Description

The Shade Tree program is an existing program with an updated Commission approval in Decision No. 74262. The program promotes energy conservation and environmental benefits by incenting customers to plant desert-adapted trees in targeted locations where the trees will provide shade to dwellings, thereby reducing energy use for air conditioning.

#### Program Objectives and Rationale

The primary objective of the program is to promote the strategic planting of trees to provide shade, thereby reducing energy used for cooling of homes and other buildings. The program also educates school-age children and the public on the conservation and environmental benefits of planting trees.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

Program delivery is provided by UNS Electric staff and consists of a customer purchasing the qualifying tree(s), completing an application, and returning the application to UNS Electric; after which, a credit of \$15 per tree is applied to their electric account. UNS Electric also utilizes a complementary marketing strategy by purchasing trees at wholesale prices and distributing the trees free of charge to UNS Electric customers at community events such as Home Shows or other promotional events. This keeps delivery costs low and improves the cost-effectiveness of the program.

#### Cost-Effectiveness

In Decision No. 74262, the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

#### Other Information

UNS Electric has updated the savings estimates from installation of shade trees after conducting research and field verification. These new energy and demand savings estimates were used in this 2015 EE Plan.

### **F. Low-Income Weatherization**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

#### Program Description

The LIW program is an existing program with an updated Commission approval in Decision No. 74262. The program helps conserve energy and lower utility bills in UNS Electric households with limited incomes. Weatherization measures fall into four major categories: i) duct repair; ii) pressure management/infiltration control; iii) attic insulation; and iv) repair or replacement of non-functional or hazardous appliances. Weatherization is conducted in accordance with the Weatherization Assistance Program ("WAP"), a program funded by the U.S. Department of Energy. Household income and participation guidelines will be consistent in an on-going manner with current policy criteria used by the Governor's Office on Energy Policy ("GOEP").

#### Program Objectives and Rationale

The main objectives of the program are to lower low-income customer's energy consumption in conjunction with GOEP and WAP rules, as well as to increase the number of homes weatherized annually. Program funds provide up to \$3,000 per residence to be used for energy efficient weatherization measures, equipment replacement and/or repair, etc. Community action agencies are allowed to use up to 25% of their annual budget for Health and Safety related repairs. Agencies may request a waiver of the \$3,000 limitation on a case-by-case basis.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

The program is delivered by Western Arizona Council of Governments (“WACOG”) and Southeastern Arizona Community Action Program (“SEACAP”). Both are State-approved weatherization agencies, providing program administration, planning, promotion, coordination, participant eligibility and priority, as well as labor, materials, equipment, and tracking software. Funding is provided to all agencies from UNS Electric upon documentation of work completed.

Due to the popularity of the program, DSM revenues are not allocated for advertising and promotion. Program promotion occurs mainly through community action agency partners that deliver presentations to community organizations, by leaving information at neighborhood community and recreation centers, and/or by responding to calls directed from UNS Electric. UNS Electric also promotes the program through its website and provides information during speaking engagements and outreach presentations.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

### **G. Multi-Family**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

#### Program Description

The Multi-Family program is an existing program with an updated Commission approval in Decision No. 74262. The program targets multi-family buildings with 5 dwelling units or more to install CFLs and low-flow water devices. Additionally, multi-family facility managers are encouraged to partake in the C&I Facilities program, which promotes measure installation for the common areas.

#### Program Objectives and Rationale

The EE potential in the multi-family housing market remains largely underutilized and represents a significant potential to increase the Company’s program portfolio. Because of various market barriers, such as split incentives, capital constraints, and lack of awareness, EE improvements typically fall far below on a multi-family housing unit’s priority list. Through the direct installation and renovation/rehabilitation implementation framework, this program fills the gap and provides substantial energy savings.

The objectives of the program are: i) to reduce peak demand and overall energy consumption in the multifamily housing market; ii) to promote EE retrofits for both dwelling units and common areas; and iii) to increase overall awareness about the importance and benefits of EE improvements to the landlord and property ownership community.

New Measures for 2015

No new measures are included for 2015.

Delivery and Marketing Strategy

Program delivery is provided by UNS Electric staff. To encourage EE upgrades the program will offer the following delivery tracks:

- A direct installation of selected low-cost EE improvements in existing complexes; and
- Common area EE improvements in existing complexes that will be incented through the C&I Facilities program.

Marketing and communications strategies include notifying complex managers and owners through updates to the website, training seminars, call center on-hold messages, direct mail promotion, outreach to rental housing industry associations, and working with contractors and industry specialists. Primary emphasis is placed on low-income, subsidized housing complexes and on larger, older, and less efficient complexes.

Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

## V. Commercial & Industrial Programs

The following section presents a summary of UNS Electric's C&I programs.

### A. C&I Facilities

*UNS Electric is requesting budget approval and approval to offer five additional measures in 2015.*

#### Program Description

The C&I Facilities program is an existing program with an updated Commission approval in Decision No. 74262. The program offers incentives for a select group of retrofit and replace-on-burnout ("ROB") EE measures in existing facilities. Eligible participants include small and large commercial customers including schools and other educational facilities. The program offers incentives for the installation of EE measures including: lighting equipment and controls; HVAC equipment; motors and motor drives; compressed air; and refrigeration measures.

#### Program Objectives and Rationale

The C&I Facilities program is designed to address barriers of entry for this market segment, including the issues of limited investment capital, limited awareness of energy cost savings, and required short-term payback. The program's purpose is to persuade small business customers to install high-efficiency equipment at their facilities and encourage contractors to promote the program.

#### New Measures for 2015

Table 5-1 presents new measures to be incentivized by the program in 2015. The incentive level represents the weighted result of the average incentive, which varies depending on the size of the lamp being rebated. Overall, the C&I incentive levels have been designed to be consistent with those approved in Decision No. 74262.

**Table 5-1. Measure Efficiencies, Incentive Level, Participation, and Benefit-Cost<sup>5</sup>**

Program Measures	Base Efficiency	High Efficiency	Avg. Incentive	Estimated Participation	Societal Cost Test
LED Indoor Lighting	Avg 55 W Incandescent	Avg 10 Watt LED	\$20 per lamp	250	1.3
LED Outdoor Lighting	Avg 55 W Incandescent	Avg 10 Watt LED	\$20 per lamp	100	1.1
Interior High-Bay LED Lighting	Avg 458 W HID	Avg 154 W LED	\$100 per fixture	75	1.3
T-8 to LED Tubes	34-40 Watt T-8	17-20 W LED Tubes	\$20 per fixture	100	1.3
Exterior HID to LED	Avg 599 W MH	Avg 89 W LED	\$100 per fixture	500	1.6

#### Delivery and Marketing Strategy

The "up-stream" market program offers incentives directly to pre-qualified installing contractors who provide turn-key installation services to customers. This is intended to reduce the time of payback to one year or less. The program also provides consumer and trade allies with educational and promotional

<sup>5</sup> Additional detail on lifetime energy savings, societal benefits/costs, and environmental benefits of new measures is included in Exhibit 1.

pieces designed to arm decision makers in the small business market with the ability to make informed choices.

The marketing strategy includes education seminars tailored to the small business market, major media advertising, website promotion, outreach and presentations at professional and community forums, and direct outreach to customers.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing and proposed measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

#### Other Information

There is currently an annual incentive cap of \$10,000 for participating UNS Electric customers. In order to increase participation UNS Electric is requesting Commission approval to increase this cap to \$25,000. The existing annual incentive cap of \$50,000 for two Large Power Service ("LPS") customers will remain.

### **B. Bid for Efficiency Program**

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

#### Program Description

The BFE program was approved as a pilot program by the Commission in Decision No. 72747 (January 20, 2012). After two years of cost-effective implementation, the program was approved for continuance in Commission Decision No. 74262. As a result, UNS Electric is removing the "Pilot" tag from the program name.

The program is designed to take an innovative approach to EE by using elements of competition and the potential for high rewards to enhance customer interest. BFE involves a pool of funds that are bid on through unique proposals, including costs, savings and incentives, which are unique to that project. UNS Electric selects winning applicants based on specified criteria. The BFE concept has been successfully deployed in other jurisdictions.

BFE participants and project sponsors include commercial customers, Energy Service Companies ("ESCOs") or other aggregators who organize proposals that involve multiple sites. The BFE program offers solutions to the typical customer barriers to entry; such as small savings levels at multiple sites, longer payback periods, and organizing implementation contractors, as well as offering a simplified application process. Results are verified through MER activity.

#### Program Objectives and Rationale

BFE encourages customers and project sponsors to think creatively and to develop projects designed to optimize system energy use as a whole, rather than considering the energy usage of each individual piece of equipment. The program fosters customer-driven project activity (e.g., customers select appropriate measures and professionals to implement measures), and encourages the implementation of comprehensive, multi-measure projects.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

The program is delivered through an IC. UNS Electric markets the program directly to key customers and aggregators. Particular emphasis is paid to key market sectors such as grocery and convenience stores. UNS Electric, and/or its IC, conducts informational meetings with potential participants and project sponsors to explain the program rules and encourage participation.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

### **C. Retro-Commissioning**

***UNS Electric is requesting budget approval to continue this program with no additional modifications.***

#### Program Description

The RCx program is an existing program with an updated Commission approval in Decision No.74262. The program uses a systematic approach to identify building equipment and processes that are not achieving optimal efficiency in existing facilities. Eligible program applicants receive free screening energy audits. Participants also receive training to ensure proper operating and maintenance practices over time.

#### Program Objectives and Rationale

The RCx program seeks to generate significant energy savings by retrofitting existing C&I facilities. The program delivers customer benefits by lowering energy bills and improving building performance and occupant comfort while reducing maintenance calls. The program develops an RCx contractor pool, and enables UNS Electric to build relationships with C&I customers, thus leading to other areas of participation in UNS Electric's portfolio of EE programs. RCx programs in other utility service territories have delivered average energy savings in the range of 5-15% per facility, and measures implemented as a result of the program's activity typically pay for themselves in less than two years.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

The RCx program is marketed using traditional forms of media (e.g., print, web, newsletters, etc.), as well as targeted direct mail and outreach to engineering and trade associations. UNS Electric and the IC also reach out directly to contractors who currently are, or could be, practicing in this area. The UNS Electric website includes information and links for participation. UNS Electric account managers have been utilized to reach out to larger customers to encourage participation.

#### Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

**D. C&I Demand Response**

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

Program Description

The C&I Demand Response program is an existing program with an updated Commission approval in Decision No. 74262. This is a C&I load curtailment program. The program is designed to manage peak demand and mitigate system emergencies. For those customers who choose to participate, UNS Electric will install equipment that provides Company control of either selected loads or the entire electric load in a facility.

The Company will install metering equipment for all participants to enable proper tracking of interval load data to ensure customer participation in any control event and also to provide data for post event analysis. In addition, participants must agree to be placed on UNS Electric's Interruptible Power Service tariff in lieu of any cash incentive for participation.

Program Objectives and Rationale

C&I load represents a significant portion of the Company system's demand during peak hours in the late afternoon and evening hours during summer months. Modification to controls for chillers, rooftop AC units, lighting, fans, and other end uses can reduce power demand at peak times. In addition, the program may be used to support standard benefits of demand-response programs, which include: i) avoided firm capacity required to meet reserve requirements; ii) reduced or avoided open-market power purchases during periods of high energy prices; and iii) greater grid stability and reduction in outages due to reduced grid demand. The program can also be used to help stabilize the system in times of emergency.

New Measures for 2015

No new measures are included for 2015.

Delivery and Marketing Strategy

The program is delivered by UNS Electric staff that engages with commercial and industrial customers, and encourages those customers to participate in a proactive demand response program.

Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness for demand response programs is determined over the program life, and is not evaluated on a year-by year basis.

Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.



## VI. Behavioral Comprehensive Programs

This section discusses UNS Electric's continuing behavioral suite of programs.

### A. Behavioral Comprehensive

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

#### Program Description

The Behavioral Comprehensive program is an existing program with an updated Commission approval in Decision No. 74262. Technology can only achieve a finite amount of efficiency potential. The barriers to wider spread implementation of EE are sociological, not technological. Capturing full EE potential requires behavior change. All EE programs need to integrate behavior change strategies into the DSM portfolios in order to capture this. Behavioral initiatives apply to all UNS Electric customers. The focus for this effort is on behavioral changes within residences.

The types of behaviors to be influenced include:

- Habitual behaviors
  - » Adjust thermostat setting
  - » Turn off unnecessary lights
- Small purchasing and maintenance behaviors
  - » Purchase and install faucet aerators and low flow shower heads
  - » Purchase and install CFLs
  - » HVAC maintenance
- Larger purchasing decisions
  - » Purchase an ENERGY STAR® appliance
  - » Purchase higher EE heating and cooling system through participation in a UNS Electric DSM program

The Behavior suite of programs will use four delivery mechanisms to achieve its objectives as shown in Table 6-1.

**Table 6-1. Summary of Behavioral Programs**

Behavioral Programs			
1	Behavior Comprehensive		
	1a	Direct Canvassing	Door to door awareness and direct install campaign
	1b	K-12 Education	Classroom education including take home direct install kits
	1c	Community Education	"Train the trainer" approach and promotional direct install kits
	1d	CFL Promotions	CFL bulb promotions at outreach events

Program Objectives and Rationale

The main objective of the behavioral programs is to provide customers with more information, allowing them to better understand and manage residential energy usage. Several approaches have been implemented and assessed to determine the effectiveness of making this information available. Some of the programs' major objectives include:

- Generation of significant savings for DSM portfolio objectives;
- Development of relationships with UNS Electric customers leading to other areas of participation in UNS Electric's portfolio of DSM programs;
- Promotion of efficient building operations; and
- Lowering customer's energy bills.

New Measures for 2015

No new measures are included for 2015.

Delivery and Marketing Strategy

Delivery of the program is by UNS Electric staff, except for the K-12 measure which is delivered by an IC. All UNS Electric residential customers are eligible for this program. Delivery is offered to various groups of customers as selected by UNS Electric and those who attend events.

Cost-Effectiveness

In Decision No. 74262 the Commission determined the program to be cost-effective. UNS Electric will continue to monitor the cost-effectiveness of the program. Cost-effectiveness detail for the existing measures is provided in Exhibit 1.

Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

## **VII. Support Programs**

Support programs cut across the other program areas and provide technical and financial support for the effective implementation of all other programs.

### **A. Consumer Education and Outreach**

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

#### Program Description

The CEO program is an existing program with an updated Commission approval in Decision No. 74262. The program is intended to increase participation in the Company's other DSM/EE programs, but is also intended to effect a broader market transformation, including changes in customer's behavior. The program includes two basic educational components:

- General EE advertising component will cover seasonal ads that encourage energy savings through energy saving tips, marketing the on-line energy audit, and marketing other EE programs to customers; and
- Time-of-Use ("TOU") education to teach residential and small commercial customers about the benefits of TOU rates and enable customers to maximize savings through load shifting.

#### Program Objectives and Rationale

The program consists of education and marketing material to inform customers about the benefits of energy conservation and how to achieve energy savings. Because the aim of this program is to change behavior, it is difficult to objectively assess cost effectiveness or measure actual energy or environmental savings.

#### New Measures for 2015

No new measures are included for 2015.

#### Delivery and Marketing Strategy

There are no significant changes in implementation approach or delivery strategy for the items in this program.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

### **B. Energy Codes and Standards Enhancement Program**

*UNS Electric is requesting budget approval to continue this program with no additional modifications.*

#### Program Description

ECSEP is an existing program with an updated Commission approval in Decision No. 74262. The program will strive to maximize energy savings through adherence to local building energy codes and through enhanced energy efficient appliance standards. The program will employ a variety of tactics aimed at: i) improving levels of compliance with existing building energy codes and appliance standards; and ii) supporting periodic updates to energy codes and appliance standards as warranted by market conditions. Specific program activities will depend on the needs of the local code officials. The program will include:

- Better educating local code officials and building professionals on existing standards;

- Providing documentation of the specific local benefits of code enforcement, which can promote energy code changes over time;
- Ensuring utility incentive programs align with local energy codes and appliance standards;
- Collaboration with relevant stakeholders to build a more robust community, with the goal of advancing strong, effective building energy codes and appliance standards across the local jurisdictions within UNS Electric service territories; and
- Advocating for energy code and appliance standard updates over time.

#### Program Objectives and Rationale

Increase energy savings in new construction and renovated buildings, in both the residential and commercial sectors, through improving levels of compliance with existing building energy codes, supporting periodic energy code updates as warranted by market conditions, and advocating for higher efficiency electric appliances.

#### New Measures for 2015

No new measures included in the program for 2015.

#### Delivery and Marketing Strategy

Program activities were selected based on previously effective approaches used in other jurisdictions, such as California and Massachusetts, as well as feedback from local code officials, and municipal leaders in locations that currently lack building codes. Program staff maintains a consistent level of activity and engagement with relevant stakeholders. Activities include: participation in energy code adoption committees, technical support (calculations, research, information) for code adoption committees, public testimony in support of code adoption before city councils, participation in organizations that promote increased appliance standards for EE (such as the Consortium for Energy Efficiency), ensuring that ongoing DSM programs align well with energy code requirements and appliance standards, and funding for local agencies to enforce and improve energy codes and appliance standards over time.

Marketing strategy includes website promotion, direct outreach to local code officials and networks of municipal leaders who are members of committees conducting activities related to building code enhancement and communications with other UNS Electric EE program implementation staff.

#### Measurement, Evaluation, and Research Plan

The MER plan is consistent with the previously filed strategy.

## **VIII. Portfolio Management**

UNS Electric serves as the program administrator for the EE Portfolio. To take advantage of the positive experiences from other jurisdictions, UNS Electric implements programs through a combination of third-party ICs and utility staff. UNS Electric designs programs on the most cost-effective basis utilizing ICs when they provide the lowest cost per kWh and, likewise, utilizing UNS Electric staff when their use provides the lowest cost per kWh. ICs are selected through a competitive request for proposal process for delivery of programs.

UNS Electric provides high-level administrative, contract management, program design and marketing oversight of the selected ICs. A portfolio of this size and scope requires careful management oversight. UNS Electric has a dedicated group of EE program staff overseeing third-party implemented programs and promotion of cross-sector education and awareness activities.

UNS Electric staff takes primary responsibility for general EE education and awareness strategies and activities, including maintaining the Company's website, and distributing mass-market general education and efficiency awareness promotions.

In summary, UNS Electric provides comprehensive program contract oversight, strategic planning, including management, financial planning and budgeting, as well as:

- High-level guidance and direction to the ICs, including review and revision of proposed annual implementation plans and proposed milestones. The Company will additionally engage with the contractor team on a daily basis when working through strategy and policy issues;
- Review and approval of IC invoices and ensure program activities are within budget and on schedule;
- Review of IC operational databases for accuracy, ensuring incorporation of data into UNS Electric's comprehensive portfolio tracking database to be used for overall tracking and regulatory reporting;
- Review of measure saving estimates maintained by the IC;
- Oversight and coordination of evaluation, measurement, and verification of ICs;
- Public education and outreach to community groups, trade allies, and trade associations;
- Provide guidance and direction on new initiatives or strategies proposed by the ICs;
- Communicate to ICs the other UNS Electric initiatives that may provide opportunities for cross-program promotion;
- Review and approve printed materials and advertising plans from ICs;
- Create and provide collateral material for advertising on programs delivered by the utility;
- Evaluate portfolio and program effectiveness, and recommend modifications to programs and approach as needed; and
- Perform periodic review of program metrics, conduct investment analysis, and review evolving program design.

**A. Marketing and Outreach Strategy**

The marketing and outreach strategy for this portfolio of programs encourages participation among customers, key market players, and trade allies. The objective of the marketing and communications strategy is to make customers and key market actors aware of the Company's program offerings and benefits, and to influence their decision to use more energy efficient options making when purchasing or installing energy systems or equipment.

The specifics of the marketing strategy depend on the program and the demographics of the group being engaged. Depending on the market to be reached, marketing will generally include a mix of broadcast, Internet, print media, radio, direct contact, direct mail, bill inserts, or presentations. The program descriptions describe the proposed marketing approach for each program.

Additionally, UNS Electric works with regional, state, and national programs and partners to optimize cooperative marketing programs and campaigns. Marketing efforts are designed to dovetail with other statewide or regional efficiency programs and campaigns, including those offered by APS.

**B. Tracking and Reporting**

UNS Electric built a comprehensive internal tracking and reporting system to record all activities from the portfolio of programs. ICs will be responsible for tracking and reporting EE program activities by entering details of each project into the comprehensive data tracking system. The system allows customized reporting to meet reporting requirements in a quick, transparent and accurate manner.

**C. Midstream Adjustments**

While this plan presents detailed information on approach, EE measures and proposed incentive levels, unforeseen changes in the market condition, may require regular review and revisions of portions of this plan to reflect this new information. As such, adjustments to these programs may be necessary. When this is the case, the Company will update the Commission in a timely manner and give the Commission opportunity to provide input.

**D. Inter-Utility Coordination**

UNS Electric works with APS and other utilities to maximize the effectiveness of the programs; in particular, where gas and electric services overlap, regular communication and coordination will be necessary. This collaboration involves working together to identify savings opportunities, as well as providing consistent messaging and parallel programs to reduce confusion and difficulty for customers and trade allies. UNS Electric intends to continue collaboration with others to provide cohesive marketing messages, as well as designing incentive programs, incentive forms and incentive levels that are easily transferable with adjacent utilities.

**E. Leveraging Other Efficiency Initiatives**

Within Arizona, several entities and initiatives are promoting EE including: the state government; Southwest Energy Efficiency Project ("SWEET"); U.S. Environmental Protection Agency and U.S. Department of Energy's "ENERGY STAR®" brand; and Federal tax credits. UNS Electric and its implementation contractors work diligently to remain aware and up to date, and to cooperate with efficiency efforts being directed at Arizona energy users. Wherever feasible, co-marketing efforts are employed in an attempt to send a clear and consistent message on the benefits of EE and the resources available to help achieve it.

**F. Trade Ally Coordination**

Trade allies are essential to effective implementation of any EE program. Trade allies are considered program partners and are regularly informed of the UNS Electric program's progress. Open communication from trade allies about what is and is not working in the field is essential. To ensure good

two-way communication, the Company emphasizes coordination, listening sessions, and frequent communications with these key partners to advance program goals. A schedule of meetings, workshops, educational seminars, program update breakfasts, and clear and concise program descriptions are distributed to the trade allies at the program kick off meetings. Ongoing training and program updates will be a key part of program delivery.

## **IX. DSMS Tariff**

Because UNS Electric anticipates a DSM Surcharge (“DSMS”) reset by the Commission later in 2014 the Company is not requesting a change in the DSMS as part of this EE Plan. If necessary, the Company will file a separate DSMS request to recover costs associated with this EE Plan in 2015 or 2016.



# **EXHIBIT 1**

## Exhibit 1 – Proposed and Existing DSM Measures

**Table 1a: Proposed New DSM Measures, Societal Benefits, Societal Costs, Benefit-Cost Ratio, Environmental Benefits**

Efficient Products											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
LED Home Lighting	44 W Incandescent Blended	11.6 W LED Blended	Per bulb	36	0	0.001	15	\$9.76	\$2.89	3,100	1.5

C&I Facilities											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Exterior HID to LED	Wtd Avg MH Fixtures (599 W)	Wtd Avg LEDs (89 W)	Per fixture	2,234	0	0.00	11	\$298.26	\$191	500	1.6
Interior High-Bay LED Lighting	Wtd Avg MH Fixtures (458 W)	Wtd Avg LED (154 W)	Per fixture	1,213	0	0.16	11	\$394.26	\$104	75	1.3
LED Indoor Lighting	55 W Incandescent/Blended	10 W LED/Blended	Per Bulb	150	0	0.02	8	\$34	\$9	250	1.3
LED Outdoor Lighting	55 W Incandescent/Blended	10 W LED/Blended	Per Bulb	198	0	0.01	7	\$34	\$11	100	1.1
T-8 to LED Tubes	34-40 W T-8 Lamps	17-20 W LED Tubes	Per Fixture	93	0	0.01	11	\$26.10	\$8	100	1.3

## Exhibit 1 – Proposed and Existing DSM Measures

**Table 1b: Existing DSM Measures, Societal Benefits, Societal Costs, Benefit-Cost Ratio, Environmental Benefits**

Appliance Recycling											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Freezer Recycling	2nd freezer plugged in	remove 2nd freezer	Per Unit	1,316	0	0.18	6	\$0	\$173	68	2.1
Refrigerator Recycling	2nd fridge plugged in	remove 2nd fridge	Per Unit	1,327	0	0.18	6	\$0	\$175	332	2.1

Behavioral Comprehensive Program											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
CFL Outreach Promotion (13W CFLs)	no action	13W CFLs	Per Home	34	0	0.00	6	\$1.30	\$1	35,000	2.8
Community Education Kit	no action	6 13W CFL, Showerhead, Faucet Aerator, LED nightlight, Refrigerator thermometer	Per Home	298	18.55	0.01	9	\$16	\$20	250	5.7
Direct Canvassing	no action	4 CFLs	Per Home	136	0	0.00	7	\$6.56	\$7	4,500	2.6
K-12 Education Kit	no action	6 13W CFL, Showerhead, Faucet Aerator, LED nightlight, Refrigerator thermometer	Per Home	298	18.55	0.01	9	\$35	\$20	3,000	3.6

\*\*Total of multiple values equivalent to one measure. i.e. all electric and dual fuel; AC and HP; Commercial NC codes, residential NC codes, appliance standards

## Exhibit 1 – Proposed and Existing DSM Measures

Efficient Products											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Advanced Power Strips - Load Sensor	standard strips	Smart Strips - Load Sensor	Per Sensor	82	0	0.01	12	\$32	\$0	0	1.3
ES Integral CFL	54 W Blended	Wtd Avg 16 W CFL	Per bulb	37	0	0.00	7	\$2.05	\$1	300,310	2.9
Residential 2X Incandescent	79 W Average Baseline	50 W Average 2X Incandescent	Per bulb	21.3	0	0.001	2	\$1.32	\$0	3,000	1.0
ENERGY STAR Clothes Washer	Standard Washer	ENERGY STAR Washer	Per Unit	1,744	0	0.12	11	\$240	\$102	10	2.9
ENERGY STAR Dishwasher	Standard Dishwasher	ENERG STAR Dishwasher	Per Unit	48	0	0	11	\$10	\$3	10	2.9
ENERGY STAR Central Air Conditioner	13 SEER	14.5 SEER ENERGY STAR	Per Unit	1,724	0	1.49	14	\$556	\$129	10	4.4
ENERGY STAR Room Air Conditioner	13 SEER	14.5 SEER ENERGY STAR	Per Unit	199	0	.02	9	\$50	\$10	10	1.3
ENERGY STAR Refrigerator	Standard Refrigerator	ENERGY STAR Refrigerator	Per Unit	108	0	.01	12	\$30	\$7	10	1.6
Pool Pump Timers	no timer	Pool Pump Timers	Per Unit	1,105	0	0.11	10	\$198	\$0	0	2.6
Variable Speed Pool Pump	single speed baseline	Variable Speed Pool Pump	Per Unit	2,023	0	0.21	10	\$650	\$108	150	1.3

Existing Homes and Audit Direct Install											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
**DTR ≥14% Reduction leakage	no action	Duct Sealing with Testing	Per Unit	1150	2.5	0.76	20	\$732	\$265	90	2.3
**DTR ≥50% Reduction leakage	no action	Duct Sealing with Testing	Per Unit	2,404	7	1.61	20	\$732	\$553	90	3.7
**ER HVAC_QI_DTR ≥14% Reduction leakage	11 SEER or > 15 Years	EnergyStar	Per Unit	2,341	2	2.23	20	\$1,732	\$700	90	2.6
**ER HVAC_QI_DTR ≥50% Reduction leakage	11 SEER or > 15 Years	EnergyStar	Per Unit	4,688	5	3.44	20	\$1,732	\$1079	90	3.5

### Exhibit 1 – Proposed and Existing DSM Measures

**ER HVAC with QI	11 SEER or > 15 Years	EnergyStar	Per Unit	2,389	1	1.75	20	\$1,375	\$550	150	2.5
**HVAC_QI_DTR ≥14% Reduction leakage	11 SEER or > 15 Years	EnergyStar	Per Unit	1,701	3	1.5	20	\$971	\$392	90	2.6
**HVAC_QI_DTR ≥50% Reduction leakage	11 SEER or > 15 Years	EnergyStar	Per Unit	2,952	8	2.23	20	\$971	\$680	90	3.8
**HVAC/QI	11 SEER or > 15 Years	EnergyStar	Per Unit	1,194	2	0.875	20	\$602	\$275	125	2.8

\*\*Average of multiple values equivalent to one measure. i.e. all electric and dual fuel; AC and HP; Commercial NC codes, residential NC codes, appliance standards

Low Income Weatherization											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Low Income Weatherization	no action	Multiple EE measures	Per Home	2,265	42	1.09	17.5	\$2,500	\$310	150	1.3

Multi-Family											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
ES Integral CFL	61W Incandescent	13 W CFL	Per bulb	33	0	0.00	6	\$1.30	\$3	2,500	1.9
Low Flow Showerheads - Electric WH only	4 GPM	1.5 GPM with hot water sensor	Per shower	320	0	0.02	10	\$17	\$41	150	2.3
Faucet Aerators - Electric WH only	2.2 GPM	1.5 GPM	per faucet	90	0	0.01	10	\$2	\$12	150	2.7

Res. New Construction											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
**ENERGY STAR V3	standard	Used HERS 70	Per Home	2,333	44	0.41	30	\$925	\$1,826	100	2.7

## Exhibit 1 – Proposed and Existing DSM Measures

≤ 73 HERS	home	MAS									
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\*\*Average of multiple values equivalent to one measure. i.e. all electric and dual fuel; AC and HP; Commercial NC codes, residential NC codes, appliance standards

Shade Tree											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Shade Tree	no trees	planting 1 tree	Per Tree	58	0	0.02	30	\$35	\$6	1,700	2.7

Bid for Efficiency											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Bid for Efficiency	baseline building	Bid projects	Per customer	400,000	0	194	10	\$80,000	\$11,501	8	3.7

### Exhibit 1 – Proposed and Existing DSM Measures

C&I Facilities											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
**14 SEER Packaged and Split	SEER 13	SEER 14	Per Unit	715	0	0.28	15	\$239	\$84	6	2.5
**15 SEER Packaged and Split	SEER 13	SEER 15	Per Unit	1,391	0	0.52	15	\$479	\$162	15	2.5
**16 SEER Packaged and Split AC's	SEER 13	SEER 16	Per Unit	1,947	0	0.74	15	\$718	\$227	40	2.3
Advanced Power Strips - Load Sensor	standard strips	Smart Strips - Load Sensor	Per Sensor	118	0	0.01	12	\$32	\$11	3	1.4
Advanced Power Strips - Timer Plug Strip	standard strips	Smart Strips - Timer Plug Strip	Per Sensor	213	0	0.02	12	\$19	\$20	3	2.8
Anti-sweat heater controls	no controls	Anti-sweat controls	Per Linear Ft	246	0	0.04	12	\$29	\$23	10	2.7
Custom Measures	no action	custom actions	per customer	32,674	0	16	10	\$6,535	\$2,541	25	3.1
Canopy LED	458 W Metal Halide	108 W LED	Per Fixture	1,533	0	0.00	18	\$394	\$123	400	1.5
Computer Power Monitoring System	no power monitor	computer power monitor	Per Fixture	218	0	0.01	4	\$12	\$4	25	1.9
Daylighting controls	no controls	daylighting controls	Per kW base load	1,824	0	0.24	15	\$381	\$213	2	2.1
Delamping	T8s and T12s	Remove T8s and T12s	Per Fixture	199	0	0.02	15	\$6	\$23	750	4.1
Energy efficient exit signs	Incandescent/CFL sign	LED sign	Per fixture	185	0	0.02	16	\$33	\$22	30	1.6
Evaporator Fan Controls	no controls	controls	Per Unit	1,041	0	0.15	12	\$308	\$97	10	1.5
Exterior HIDs to T8/T5	Wtd Avg MH Fixtures (565 W)	Wtd Avg T5/T8s (263 W)	Per fixture	1,089	0	0.04	18	\$86	\$153	100	2.7
Hard Wire CFL	67 W Incandescent bulb	16 W CFL	Per Bulb	172	0	0.02	6	\$14	\$8	300	1.9
High Efficiency Evaporator Fan Motors (ECM)	shaded pole muter	ECM	Per Unit	758	0	0.11	15	\$156	\$88	30	2.1

### Exhibit 1 – Proposed and Existing DSM Measures

C&I Facilities											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
High Efficiency Evaporator Fan Motors (PSC)	shaded pole motor	PSC	Per Unit	826	0	0.12	15	\$129	\$96	5	2.5
Induction Lighting	229 W Metal Halide	96 W Induction lamp	Per Lamp	451	0	0.04	18	\$244	\$63	15	1.0
Integral Screw In CFL	71 W Incandescent bulb	14 W CFL	Per Bulb	190	0	0.02	2	\$9	\$3	100	1.2
Integrated Controls/ Motors	No controls or Motor Retrofits	With controls and retrofits	Per System	30,301	0	4.44	12	\$8,355	\$1,626	2	1.7
Interior HIDs to T8/T5	Wtd Avg MH Fixtures (565 W)	Wtd Avg T5/T8s (263 W)	Per fixture	1,483	0	0.19	18	\$121	\$208	150	3.5
Occupancy sensors	no sensors	occupancy sensors	Per sensor	441	0	0.06	12	\$111	\$41	25	1.6
Outdoor CFL	112 W incandescent	25 W CFL	Per Lamp	382	0	0.02	5	\$11	\$15	100	2.9
Premium T8 Lighting	T12 Lamps	Premium T8 Lamps	Per Lamp	69	0	0.01	15	\$17	\$8	1,200	1.7
Programmable Thermostats	non-programmable	programmable	Per Unit	4,096	0	0.00	11	\$215	\$350	50	3.1
Reduced LPD	1.21 W/sqft	1.09 W/sqft	Per customer	13,283	0	1.74	12	\$4,473	\$1,240	2	1.3
Refrigerated Case LED	38 W T12/ T8 Lamps/Blended	23.6 W LED Lamps/Blended	Per Door	388	0	0.07	9	\$85	\$8	700	2.1
Refrigerated Display Automatic Door Closers	standard doors	Automatic Door Closers	Per Door	3,535	0	0.49	5	\$142	\$137	1	2.8
Screw in cold cathode CFL	30 W Incandescent bulb	6W CFL	Per Bulb	194	0	0.01	6	\$13	\$9	5	2.0
Shade Screens	no screens	shading coeff: 0.24	Per Sq Ft	9	0	0.00	10	\$4	\$1	250	1.7
Standard T8 Lighting	T12 Lamps	Standard T8 Lamps	Per Lamp	38	0	0.00	15	\$15	\$4	3,000	1.2
Variable Speed Drives	no VSD	VSD	per HP	2,317	0	0.36	15	\$388	\$270	350	2.6
Vending Miser - Beverage Case Controls	no controls	occupancy sensors	Per Sensor	1,610	0	0.22	12	\$199	\$150	10	2.6



## Exhibit 1 – Proposed and Existing DSM Measures

C&I Facilities											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Vending Miser - Reach-in Cooler Controls	no sensors	occupancy sensors	Per Sensor	1,200	0	0.17	12	\$199	\$112	10	2.2
Vending Miser - Snack Machine Controls	no controls	occupancy sensors	Per Sensor	322	0	0.04	12	\$103	\$30	10	1.4
Window Films	no film	shading coefficient: 0.578	Per Sq Ft	8	0	0.00	15	\$3	\$1	100	2.4

\*\*Total of multiple values equivalent to one measure. i.e. all electric and dual fuel; AC and HP; Commercial NC codes, residential NC codes, appliance standards

Codes Support											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Residential NC - Codes & Standards Support	No Support	With Support (1/3)	Incremental	46,000	0	30	1	\$0	\$353	1	7.4
Commercial NC - Codes & Standards Support	No Support	With Support (1/3)	Incremental	320,000	0	80	1	\$0	\$2,455	1	5.6
Motors - Codes and Standards Support	No Support	With Support (1/3)	Incremental	93,000	0	20	1	\$0	\$714	1	5.5
General Service CFL's - Codes & Standards Support	No Support	With Support (1/3)	Incremental	4,317,000	0	220	1	\$0	\$33,121	1	4.8
T-8's - Codes and Standards Support	No Support	With Support (1/3)	Incremental	218,000	0	20	1	\$0	\$1,673	1	5.0

## Exhibit 1 – Proposed and Existing DSM Measures

C&I Demand Response											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Direct Load Control for Large Commercial	no action	load control measures	per MW	3,571,056	0	4,000	NA	NA	NA	NA	NA

Retro-Commissioning											
Measure Name	Base Case Description	EE Case Description	Unit Description	Annual kWh Saved	Annual Gas Saved (Therms)	Coincident Demand Saved (kW)	Effective Useful Life	Incremental Cost/Unit	Non-Incent Program Cost/Unit	2015 Participation	Societal Test
Retro-Commissioning	baseline building	custom actions	100K sqft	200,000	0	97.06	10	\$29,333	\$7,402	7	4.7